

ASAP

Work Order ID 145085

145085

Page 1

Tuesday, May 03, 2016 10:21:37 AM

Item ID: D3290-1

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Frame

Start Date: 5/3/2016 Start Qty: 6.00

6

Cust Item ID:

Required Date: 5/13/2016 Req'd Qty: 6.00

6

Customer:

Reference:

Approvals: Process Plan: mf Date: 16-5-3 Tooling: _____ Date: _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D3290	Rev C

100 0.00

100

FLOW WATER JET

Waterjet

Memo

2.28

FLOW CNC Waterjet

1-Cut as per Dwg D3290 (use prog. for D3290-1)

Dwg Rev: _____

Prog Rev: _____

2-Deburr if necessary

110 0.00

110

QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.06

Quality Control

120 0.00

120

QC8- Inspect parts - second check

QC

Memo

0.12

Quality Control

10

12/02/16/05/10

10

12/02/16/05/10

10

DAS
38
MAY 11 2016
H.O.

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☒ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☒ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : <u>16-05-10</u>		Step #: <u>100</u>		QTY Effective : <u>7</u>			MRB (QSI042) Approval <u>989 1605-05</u>		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
<i>Operator took wrong material thickness 60 should be 40</i> <i>OK</i> <i>RC. Operator / Beam incorrect</i>				<i>Scrap / destroy</i> <i>Replace</i> <i>B# _____ OK</i> <i>Adjust beam to drawing</i>					
Root Cause				FAULT CATEGORY					
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	☒ Operator	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	☒ Wrong Stock Pulled	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐								
Misidentified ☐	Past Due ☐	OTHER :							

Work Order ID 145085

Tuesday, May 03, 2016 10:21:37 AM

145085

Page 2

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Stop ***NS2***

Item Name: Frame

Start Date: 5/3/2016 Start Qty: 6.00

6

Cust Item ID:

Required Date: 5/13/2016 Req'd Qty: 6.00

6

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start ***NR1***

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

Chemical Conversion Coat per QSI005 4.1

0.00

130

HandFinish

Memo

0.54

Hand Finishing

10 ϕ 16-05-25 16/05/25

135

QC7-Inspect Chemical Conversion Coat

0.00

135

QC

Memo

0.00

Quality Control

10 ϕ 16-05-26 16/05/26

140

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

140

Powdercoat

Memo

0.18

Powder Coating

m 134631
START TIME: 1:00.
OVEN TEMPERATURE: 220°
FINISH TIME: 1:30.10 ϕ 16-05-26 16/05/26

Picklist Print

Tuesday, May 03, 2016 10:21:36 AM

Page 1

Work Order ID: 145085

145085

Parent Item: D3290-1

D3290-1

Parent Item Name: Frame

Start Date: 5/3/2016

Required Date: 5/13/2016

Start Qty: 6.00

Required Qty: 6.00

Comments: IPP REV:A 12.06.13 NEW ISSUE DD VERF:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6S.063		Purchased		No		100	sf	530.9830	3.75	23.68421			

M6061T6S 063

6061-T6 .063 Sheet

**

du 16/05/10

Location	Loc Qty	Loc Code
MAT021	194.983	
M132358	46.254	
M133511	57.4	
M134377	91.329	
TPI	336	
M134496	192	
M134604	144	

DQA: _____ Date: _____

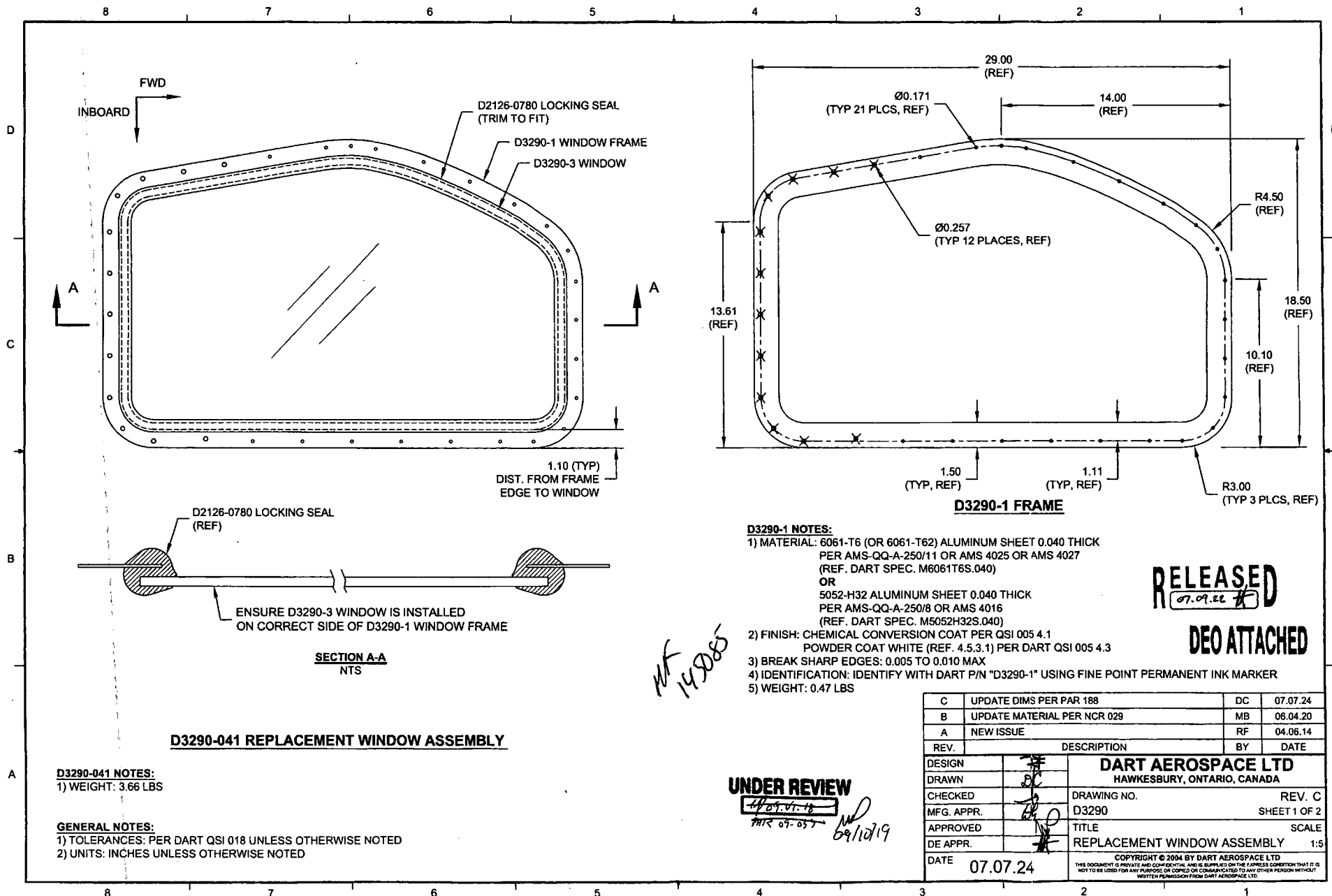


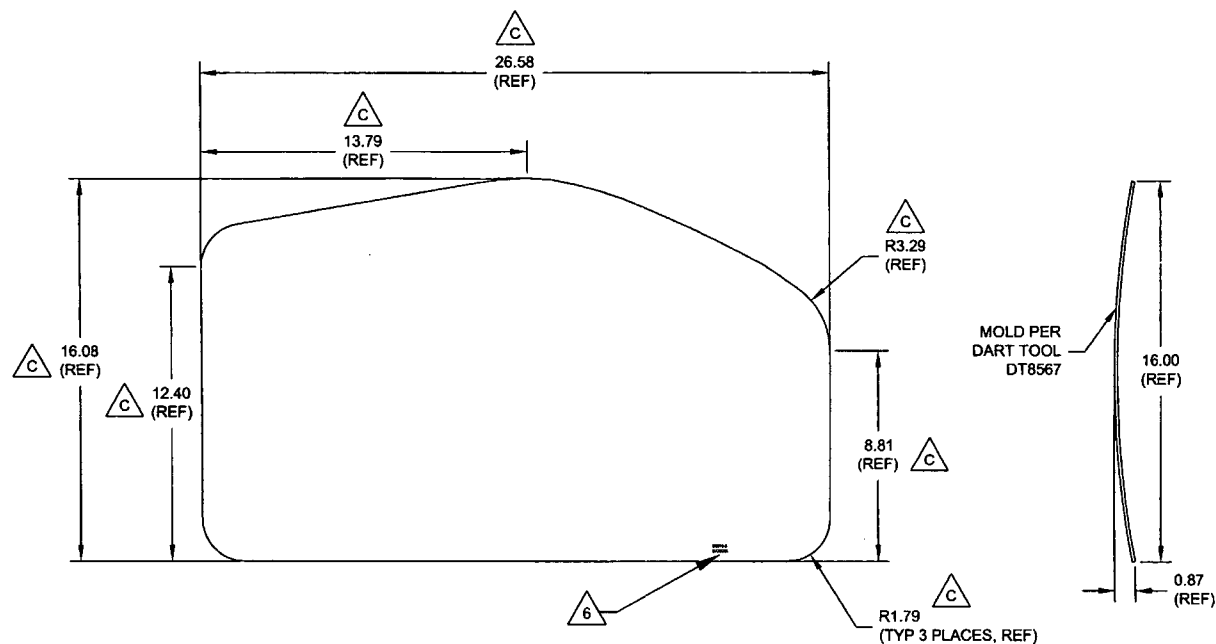
WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					





D3290-3 WINDOW

D3290-3 NOTES:

- 1) MATERIAL: POLYCAST II CLEAR ACRYLIC SHEET PER MIL-P-5425
OR PLEXIGLAS G CLEAR CAST ACRYLIC SHEET PER
LP-391 TYPE 1 GRADE C, 0.125 THICK
(REF. DART SPEC. M-ACRYLIC-S.125)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) REMOVE SHARP EDGES
- 6) IDENTIFICATION: ENGRAVE P/N "D3290-3" AND B/N ON LOWER EDGE
USE 0.125" HIGH LETTERS TO MAXIMUM DEPTH OF 0.005"
- 7) WEIGHT: 1.87 +/- 0.42 LBS
- 8) MOLD PER DART TOOL DT8567

UNDER REVIEW

**DEO ATTACHED
RELEASED**

DESIGN	<i>[Signature]</i>	DART AEROSPACE LTD	
DRAWN	<i>[Signature]</i>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	DRAWING NO. D3290	REV. C
MFG. APPR.	<i>[Signature]</i>	TITLE	SHEET 2 OF 2
APPROVED	<i>[Signature]</i>	REPLACEMENT WINDOW ASSEMBLY	SCALE
DE APPR.	<i>[Signature]</i>		1:5
DATE	07.07.24	COPYRIGHT © 2004 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE, OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

DRAWING NO. D3290	TITLE REPLACEMENT WINDOW ASSEMBLY	REV. C	DART AEROSPACE LTD ENGINEERING ORDER		D.E.O. NO. D3290-C-1	SHEET NO. SHEET 1 OF 1	SCALE NTS
DRAWN <i>q</i>	CHECKED <i>15</i>	MFG. APPR. <i>EZ</i>	APPROVED <i>MD</i>		DE APPR. <i>#</i>		
DATE 09.09.18	DATE 09.09.18	DATE 09.09.18	DATE 09/08/21		DATE 09/09/21		

PURPOSE:

CHANGE MATERIAL THICKNESS OF D3290-1 FRAME TO 0.063 FROM 0.040. REF PAR 09-033.

CHANGE:

MATERIAL CALL-OUT OF D3290-1 FRAME ON SHEET 1 IS AMENDED AS FOLLOWS:

D3290-1 NOTES

- 1) MATERIAL: 6061-T6 (OR 6061-T62) ALUMINUM SHEET ~~0.040 THICK~~ 0.063 THICK (REPLACE)
 PER AMS-QQ-A-250/11 OR AMS 4025 OR AMS 4027
~~(REF. DART SPEC. M6061T6S.040)~~ REF. DART SPEC. M6061T6S.063 (REPLACE)
 OR
 5052-H32 ALUMINUM SHEET ~~0.040 THICK~~ 0.063 THICK (REPLACE)
 PER AMS-QQ-A-250/8 OR AMS 4016
~~(REF. DART SPEC. M5052H32S.040)~~ REF. DART SPEC. M5052H32S.063 (REPLACE)

RELEASED
 2009-10-09
WTF

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DART AEROSPACE LTD		Work Order:	445085
Description: Window Frame		Part Number:	D3290-1
Inspection Dwg: D3290 Rev: C		Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
29.00	+/-0.030	29.00	/		V-Dc-02	
14.00	+/-0.030	14.00	/		Tape	
Ø0.171	+0.005/-0.001	Ø.170	/			
1.50	+/-0.030	1.506	/			
1.11	+/-0.030	1.108	/			
10.10	+/-0.030	10.10	/			
18.50	+/-0.030	18.50	/			
0.063	+/-0.010	.061	/			
R3.00	+/-0.030	3.00	/			
R4.50	+/-0.030	4.50	/			
Ø0.257	+0.006/-0.001	Ø.256	/			
13.61	+/-0.030	13.61	/			

Measured by: <u> D </u> Date: <u>16/05/10</u>	Audited by: <u> 38 </u> Date: <u>MAY 11 2016</u>	Prototype Approval: <u> N/A </u> Date: <u> N/A </u>
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Rev	Date	Change	Revised by	Approved
A	06.09.19	New Issue P/O D3290-041	KJ/JLM	
B	07.07.18	13.61 dimension removed	KJ/JLM	
C	07.09.28	Dimensions update per Dwg Rev C	KJ/EC/DD	
D	09.11.04	Dimension 0.063 was 0.040	KJ	

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

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Work Order update only ☐

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Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____		
Description Work Order Deviation				Disposition					
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